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1. (Canceled.
2. (Canceled).
3. (Canceled).
4. (Canceled).
5. (Canceled).
6. (Canceled).
7. (Canceled).
8. (Canceled).
9. (Canceled).
10. (Canceled).
11. (Canceled).
12. (Canceled).
13. (Canceled).
14. (Canceled).

15. (Canceled).

16. (Amended) A disc gang assembly configured for attachment to a mainframe of a seedbed preparation implement that is configured to be pulled in a draft direction, said disc gang assembly comprising:

(A) a frame which is configured to be connectable to the main frame and that comprises a main beam which is mountable on the mainframe and a disc support beam which is located in front of said main beam and which is connected to said main beam by a plurality of support arms; and

(B) a plurality of ground engaging rotary discs which are supported on said support beam ~~frame~~ and which are configured to rotate about an axis that extends at a gang angle relative to a perpendicular to said draft direction, wherein said frame includes hardware configured to connect said frame relative to the implement mainframe so as to permit said frame be movable relative to the mainframe so as to permit said gang angle to be infinitely adjusted through a range of at least 3°.

17. (Original) The disc gang assembly as recited in claim 16, wherein said range extends from about 5° to about 10°.

18. (Original) The disc gang assembly as recited in claim 16, wherein said frame is pivotably mountable on the mainframe adjacent a first end of said frame and is mountable on a slotted support of the mainframe at a location remote from said first end so as to permit a pin depending from said frame to slide along a slot in said slotted support for disc gang angle adjustment.

19. (Canceled).

20. (Original) The disc gang assembly as recited in claim 19, wherein said support arms are pivotable to raise and lower said disc support beam relative to said main beam and, thereby, adjust a cutting depth of said discs.

21. (Original) The disc gang assembly as recited in claim 16, further comprising an actuator that is coupled to said disc gang, that is configured to be coupled to the frame, and that is operable to move said disc gang relative to the mainframe to effect gang angle adjustment.

22. (Canceled).

23. (Canceled).

24. (Canceled).

25. (Canceled).

26. (Canceled).

27. (Canceled).

28. (Canceled).

Remarks

The Office Action rejected each of claims 16 and 18 as anticipated by Domries. Applicant does not believe Domries teaches or suggests the limitations of original claim 18 as described below. The Examiner indicated that claim 19 is not anticipated by Domries. Applicant has amended claim 16 to now include the limitations of original claim 19 and therefore believes that amended claim 16 and claims that depend therefrom are patently distinct over Domries.

With respect to claim 18, claim 18 requires a frame that is pivotally mounted to a mainframe adjacent a first end of the frame and that is mountable on a slotted support of the mainframe at a location remote from the first end. Referring to Fig. 3 of the present specification, a first end of frame member 84 is mounted at a first end to pivot about 118. While the "first end pivot" limitation may seem undistinguishing at first blush, this limitation is important. To this end, by pivoting the frame about one end, only one other brace or support structure at the opposite end of the frame 84 is required to completely support both ends of the frame member 84. In addition, the first end pivot limitation enables a configuration wherein first and second frames can be mounted side by side as in Fig. 3 of the present specification with their pivots 118 adjacent each other. Where the pivots 118 are adjacent each other, the frames can be adjusted such that the discs 86 supported by each of the frames are aligned in a single line irrespective of the gang angle. Thus, where the gang angle is 5 degrees the discs 86 supported by each of the frame members 84 can be aligned and, similarly, where the gang angle is 10 degrees, the discs 86 can also be aligned. Disc alignment can be important to causing a uniform effect across the entire width of an implement.

Turning to Domries, while Domries teaches a frame including members 152 that is mounted for movement about a pivot axis 143, Domries teaches that it is the central part of the frame members 152, not an end of the frame members 152, that is pivotally mounted. To this end, see col. 6, lines 11-15 that teaches that a bolt 157 extends through a bolt hole 156 to support frame members 152 for pivotal movement about a pivot axis 143. Here, as taught in Domries, a separate bracket or support sub-assembly including bolt and nut assemblies 168 is required at each end of frame members 152 to provide support along the entire length of the frame members 152. Thus, Domries teaches away from providing a frame member that mounts at one end to a mainframe. Here, we also note that because Domries frame members 152 are centrally mounted to the mainframe, if Domries' teachings were used to configure a system like the one in Fig. 3 of the present specification that includes two sets of discs supported by separate frame assemblies, the discs could

not be aligned irrespective of gang angle. Thus, for instance, where two frame assemblies are aligned at 5 degree gang angles, if the gang angles were increased to 10 degrees, the discs supported by the separate frame assemblies would be misaligned.

Thus, for this additional reason, Applicant believes claim 18 is patently distinct over Domries.

The Office Action also rejected each of claim 16-21 as anticipated by Van Mill. As indicated above, Applicant has amended claim 16 to include the limitations of original claim 19. Van Mill fails to teach or suggest the limitations of original claim 19 and therefore does not teach the limitations of amended claim 16.

Amended claim 16 now requires a frame including (1) a main beam that is mounted on a mainframe and (2) a disc support beam that is located in front of the main beam where the disc supporting beam is connected to the main beam by (3) a plurality of support arms and where the disc supporting beam, as the label implies, supports discs. Turning to Van Mill's Fig. 2, while Van Mill teaches a disc supporting beam 115, clearly there is no other beam behind beam 115 that could be akin to the main beam (i.e., amended claim 16 now calls for a disc supporting beam in front of the main beam and hence the main beam would have to be behind beam 115 in Van Mill's Fig. 2). In addition, because Van Mill fails to teach or suggest a main beam disposed behind the disc supporting beam 115, not surprisingly, Van Mill cannot possibly teach or suggest arm members that extend forward from a main beam to the disc supporting beam 115.

With respect to Van Mill, claim 16 now requires that the entire frame move relative to the mainframe when the gang angle is modified. Van Mill only teaches that disc supporting beam 115 moves and therefore Van Mill's frame only includes supporting beam 115 and there is no component that can be equated with the claim 16 main beam.

For at least these reasons claim 16 and claims dependent therefrom are patently distinct over Van Mill.

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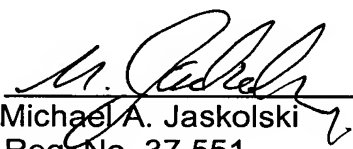
Separately, with respect to claim 20, claim 20 requires that the arms that form part of the moveable frame be pivotable to raise and lower the disc support beam relative to the main beam to adjust the cutting depth of the discs. Van Mill's moveable disc supporting member 115 (see again Fig. 3) does not include arms, much less pivotable arms for adjusting disc depth. Instead, Van Mill teaches away from such a limitation by teaching an entirely different mechanism (see pivot 129 and turn-buckle 137 in Van Mill's Fig. 5) for adjusting disc cutting depth. Thus, for this reason also Applicant believes that claim 20 is patently distinct over Van Mill.

Applicant has introduced no new matter in making the above amendments and antecedent basis exists in the specification and claims as originally filed for each amendment. In view of the above amendments and remarks, Applicant believes claims 16, 17, 18, 20 and 21 of the present application recite patentable subject matter and allowance of the same is requested. No fee in addition to the fees already authorized in this and accompanying documentation is believed to be required to enter this amendment, however, if an additional fee is required, please charge Deposit Account No. 17-0055 in the amount of the fee.

Respectfully submitted,

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